

# Business Intelligence Reporting

## Demo 2: *Modifying a Basic Ad Hoc Query*

Washington State HRMS Business Intelligence (BI)  
BI Power User Workshop Materials

General Topics - BI Power Users

# Demo 2: Modifying a Basic Ad Hoc Query

The following demonstration will show how to modify an existing ad hoc query and add features to the basic query created in Demo 1: Creating a Basic Ad Hoc Query.

This demonstration will create an ad hoc query that includes:

- Number of Employees by Personnel Area and Ethnic Origin
- Number of Female Employees by Personnel Area and Ethnic Origin
- Average Salary of Female Employees by Personnel Area and Ethnic Origin
- Employees by Personnel Area and Ethnic Origin (Free Characteristic)
- Filter by Employment Status (Active) and Personnel Number (1110)

Concepts covered in this demonstration include:

- I. Saving a Query as a New Query
- II. Adding a Restricted Key Figure
- III. Adding a Formula
- IV. Running the Ad Hoc Query
- V. Ad Hoc Query Results
- VI. Bookmark the Ad Hoc Query Results

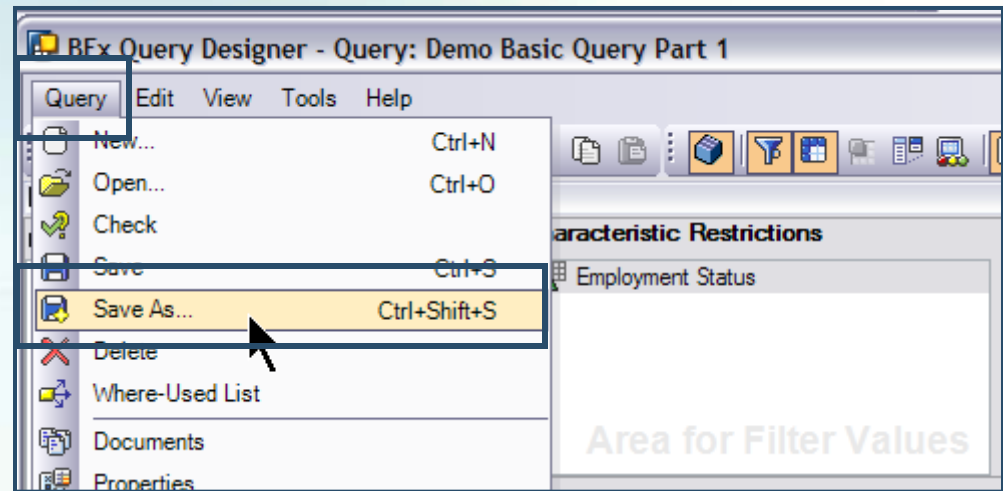
Demo Basic Query Part 2				
Display As <span>Table</span> <span>Information</span> <span>Send</span> <span>Print Version</span> <span>Export to Excel</span> <span>Comments</span>				
▼ Columns		Number of Employees ⇅	Number of Female Employees ⇅	Avg Salary - Female Employee ⇅
▪ Key Figures	Personnel Area ⇅			\$
▼ Rows	Dept of Personnel	152	110	56,000.04
▪ Personnel Area	Information Services Division	78	43	70,454.95
▼ Free characteristics	Overall Result	230	153	60,062.53
▪ Challenge Indicator				
▪ Ethnic Origin				

Demo 2: Modified Ad Hoc Query Results

# Demo 2: Modifying a Basic Ad Hoc Query

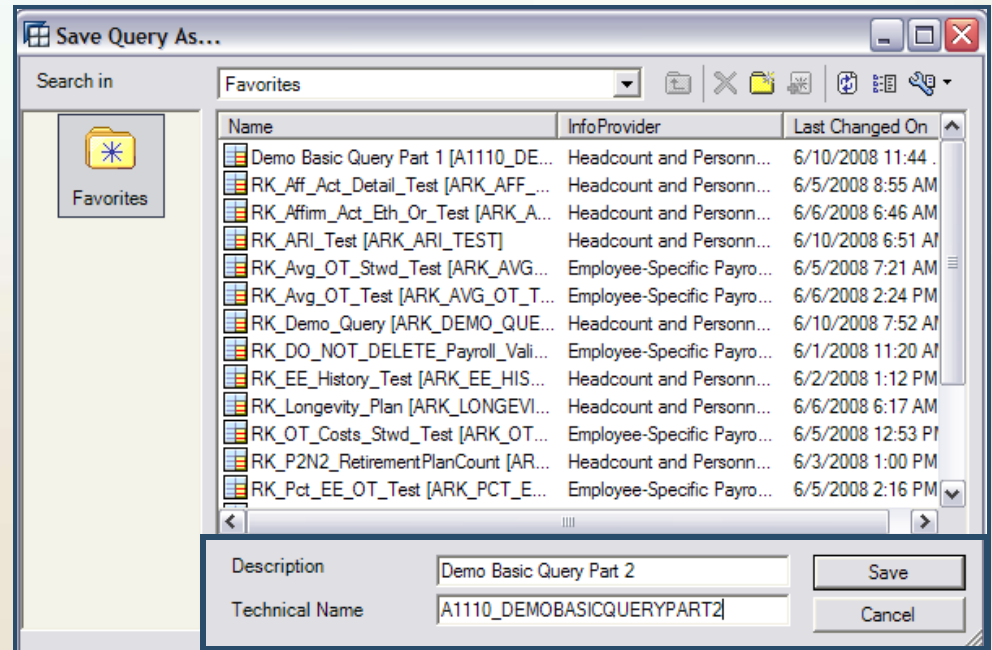
## I. Saving a Query as a New Query

1. Open the Demo Basic Query Part 1 in BEx Query Designer.
2. Click the Save Query As... from the Query option on the BEx Query Designer toolbar.



Result: The “Save Query As...” screen will be displayed.

3. Enter “Demo Basic Query Part 2 in the Description text box of the “Save Query As...” screen.
4. Enter “A1110\_DEMOBASICQUERYPART2” in the Technical Name.
5. Click Save.



# Demo 2: Modifying a Basic Ad Hoc Query

## I. Saving a Query as a New Query, Cont...

Result: A new Ad hoc query will be saved as “Demo Basic Query Part 2” and return the user to BEx Query Designer with the new ad hoc query displayed for modifications.

The screenshot shows the BEx Query Designer interface with the following components:

- Menu Bar:** Query, Edit, View, Tools, Help
- Toolbar:** Contains icons for saving, opening, and other query management functions.
- InfoProvider:**
  - Headcount and Personnel Action:**
    - Key Figures:** Calculated Key Figure, Age in Months, Age in Years, Annual Salary, Cap.Utilization Lvl, Employment Percent, Headcount FTE, Length of Service, Monthly Salary, New Annual Salary, Number of Actions, Number of Employees, Present Pos Months, Prior Annual Salary, Salary Unit Amt, Service Months 44, State Srvc in Months.
    - Dimensions:** Employee, Action, Personnel Area, Personal Data, Cost Center, Organizational Assignment, Employment.
- Filter:**
  - Characteristic Restrictions:** Employment Status.
- Default Values:** Challenge Indicator, Ethnic Origin, Personnel Area.
- Rows/Columns:**
  - Free Characteristics:** Challenge Indicator.
  - Columns:** Key Figures, Number of Employees.
  - Rows:** Personnel Area, Ethnic Origin.
- Preview:**

		Number of
a-Personne	a-Ethnic Or	
	b-Ethnic Or	
b-Personne	a-Ethnic Or	
	b-Ethnic Or	

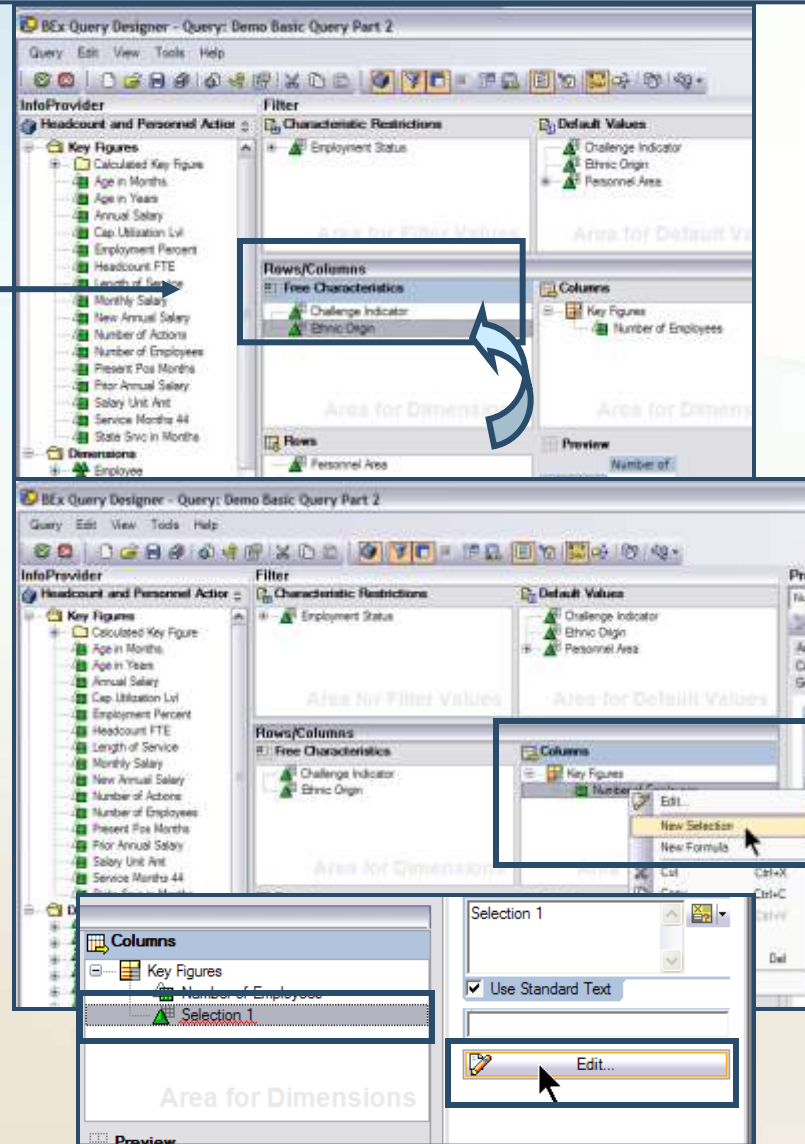


# Demo 2: Modifying a Basic Ad Hoc Query

## II. Adding a Restricted Key Figure

1. Drag&Drop the Ethnic Origin Attribute from the Rows section of the query to the Free Characteristics section.
2. Right mouse-click the Key Figure in the Columns section of the query to open the Context Menu.
3. Select New Selection.
4. Highlight the new selection and click Edit in the Properties pane.

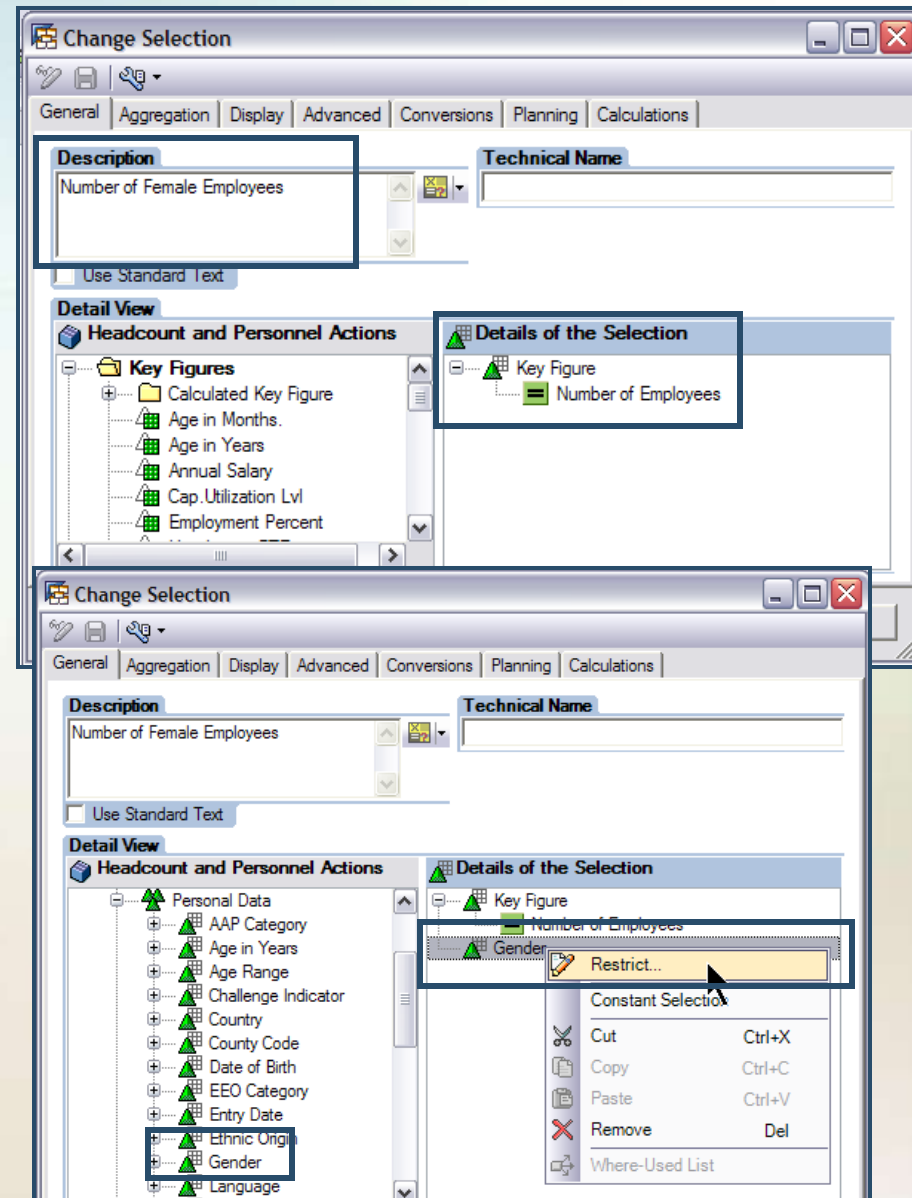
Result: The “Change Selection” screen will be displayed.



# Demo 2: Modifying a Basic Ad Hoc Query

## II. Adding a Restricted Key Figure, Cont...

4. Rename the Key Figure to “Number of Female Employees” in the Description text box.
5. Drag&Drop the Number of Employees Key Figure to the “Details of the Selection”(it may be necessary to expand the Key Figures column).
6. Drag&Drop the Gender Characteristic from the Personal Data Dimension to the “Details of the Selection”.
7. Right mouse-click the Gender Characteristic in the “Details of the Selection” to open the Context Menu.
8. Select Restrict.

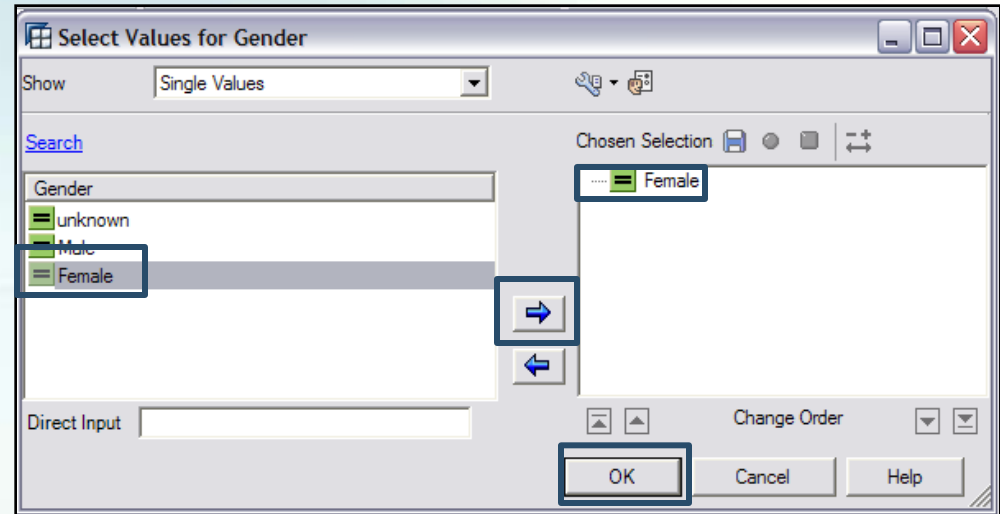


# Demo 2: Modifying a Basic Ad Hoc Query

## II. Adding a Restricted Key Figure, Cont...

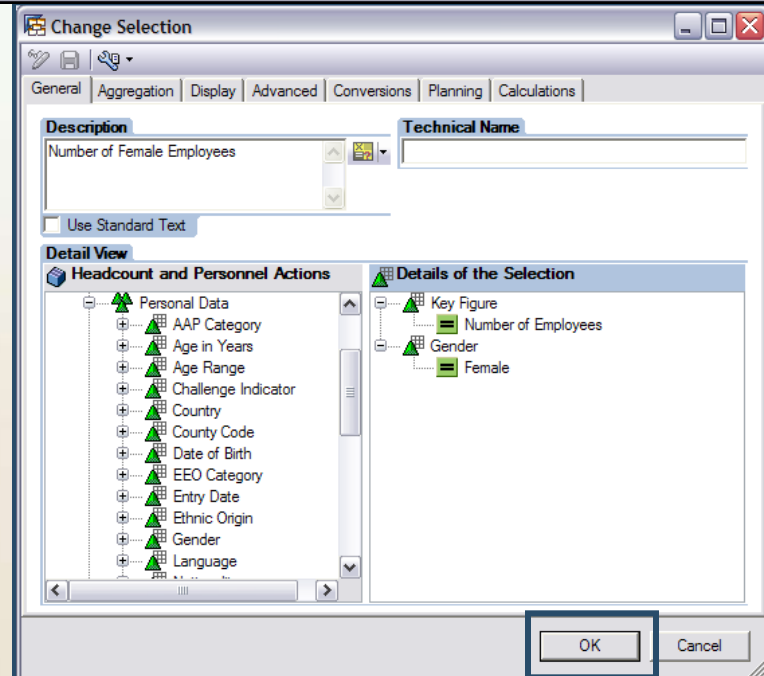
9. Drag&Drop Female from the description column to the Chosen Selection column.

10. Click OK.



Result: The Gender Characteristic restriction has been added to the Number of Female Employees Restricted Key Figure.

11. Click OK to close the Change Selection screen.



# Demo 2: Modifying a Basic Ad Hoc Query

## II. Adding a Restricted Key Figure, Cont...

Result: The Number of Female Employees Restricted Key Figure has been added in the Columns section of the query. This Key Figures will display the number of females employees in the query results.

The screenshot shows the BEx Query Designer interface for a query titled "Query: Demo Basic Query Part 2". The interface is divided into several panes:

- InfoProvider:** A tree view on the left showing the data source structure. Under "Key Figures", "Number of Female Employees" is highlighted. A callout box labeled "New Restricted Key Figure" points to this item.
- Filter:** A pane on the right showing "Characteristic Restrictions" (Employment Status) and "Default Values" (Challenge Indicator, Ethnic Origin, Personnel Area).
- Rows/Columns:** A central pane divided into "Free Characteristics" (Challenge Indicator, Ethnic Origin) and "Columns". The "Columns" section shows a list of key figures: "Number of Employees" and "Number of Female Employees".
- Preview:** A table at the bottom right showing the query results. It has two columns: "Number of" and "Number of". The rows are labeled "a-Personne" and "b-Personne".

Annotations on the screenshot include:

- "Area for Filter Values" pointing to the Filter pane.
- "Area for Default Values" pointing to the Default Values section.
- "Area for Dimensions" pointing to the Free Characteristics section.
- "Area for Dimensions" pointing to the Rows section.



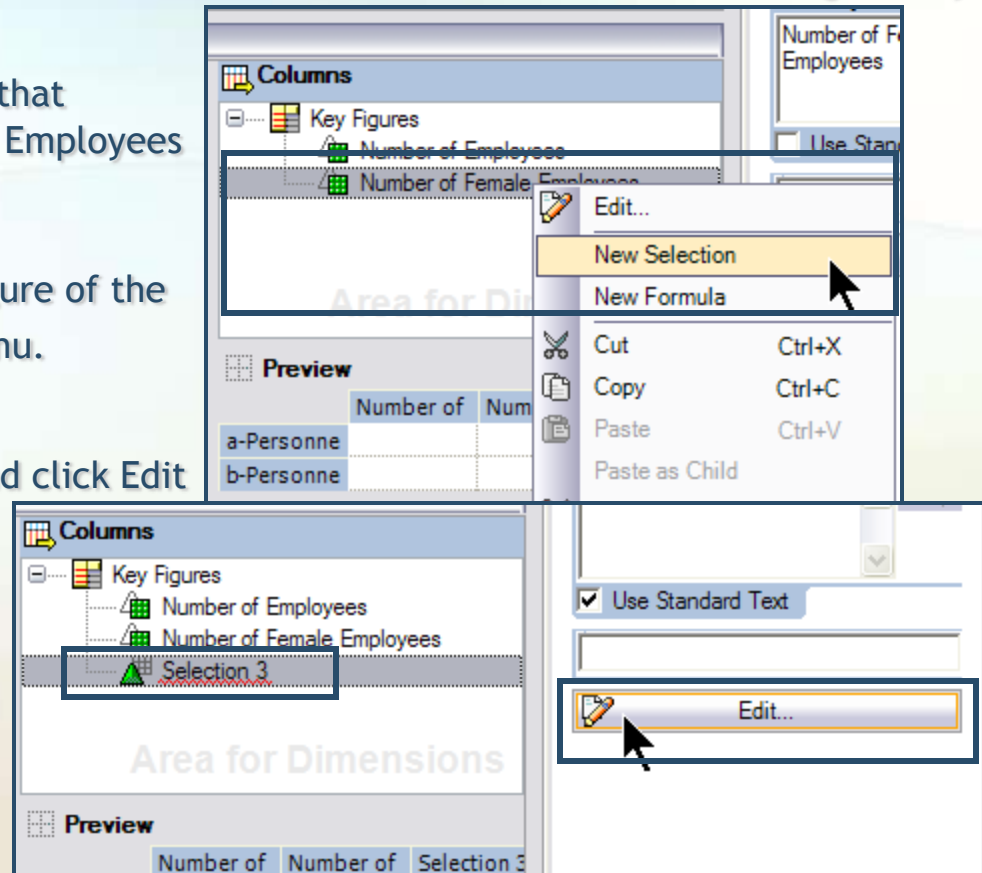
# Demo 2: Modifying a Basic Ad Hoc Query

## III. Adding a Formula

The demonstration below shows how to create a formula that will calculate the average salary for female employees.

First, create a Restricted Key Figure that includes the Annual salary of Female Employees only:

1. Right mouse-click on a Key Figure of the query to open the Context Menu.
2. Select New Selection.
3. Highlight the new selection and click Edit in the Properties pane.

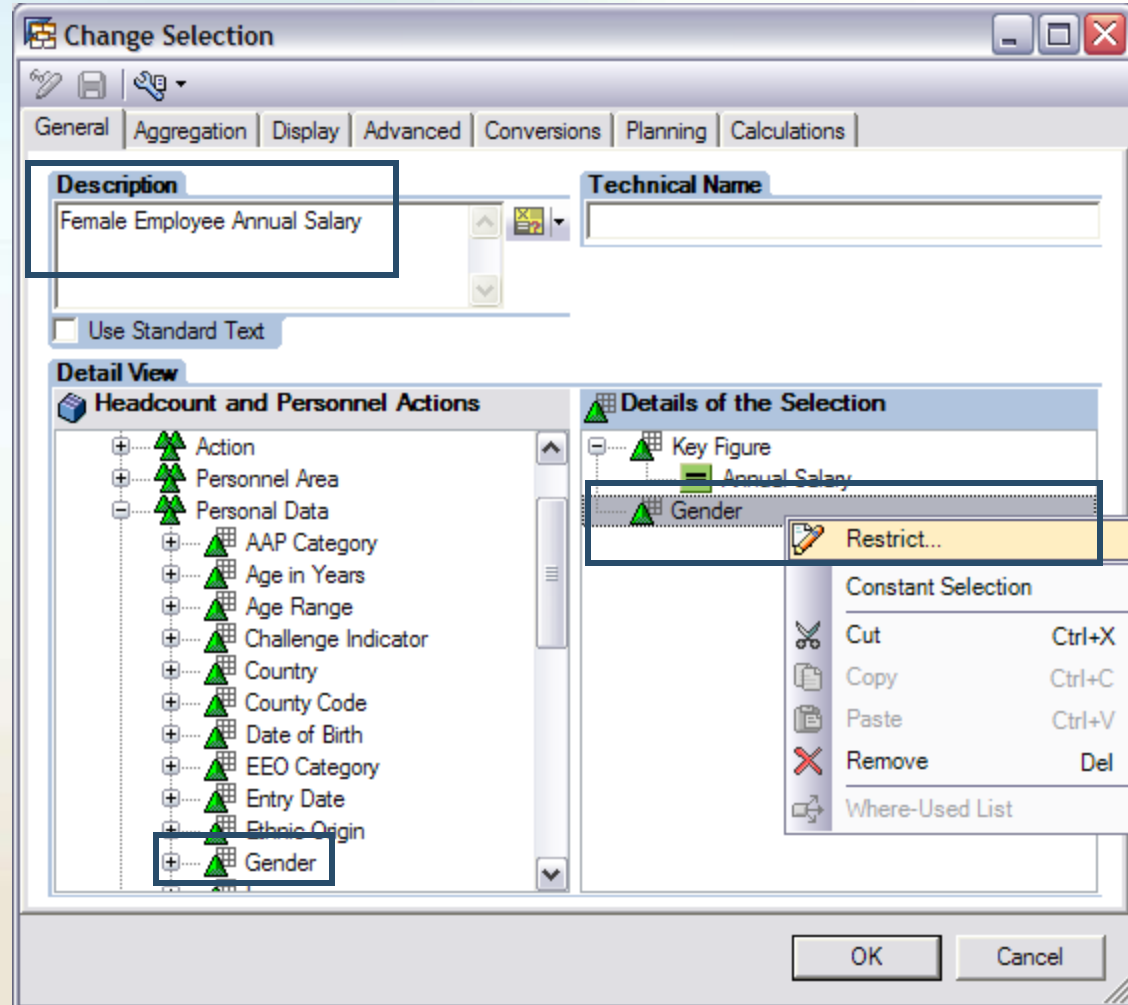


# Demo 2: Modifying a Basic Ad Hoc Query

## III. Adding a Formula, Cont...

Result: The Change Selection screen will be displayed.

3. Rename the Key Figure to “Female Employees Annual Salary” in the Description text box.
4. Drag&Drop the Annual Salary Key Figure to the Details of the Selection area.
5. Drag&Drop the Gender Characteristic to the Details of the Selection area.
6. Right mouse-click the Gender Characteristic in the Details of the Selection area to open the Context Menu.
7. Select Restrict.



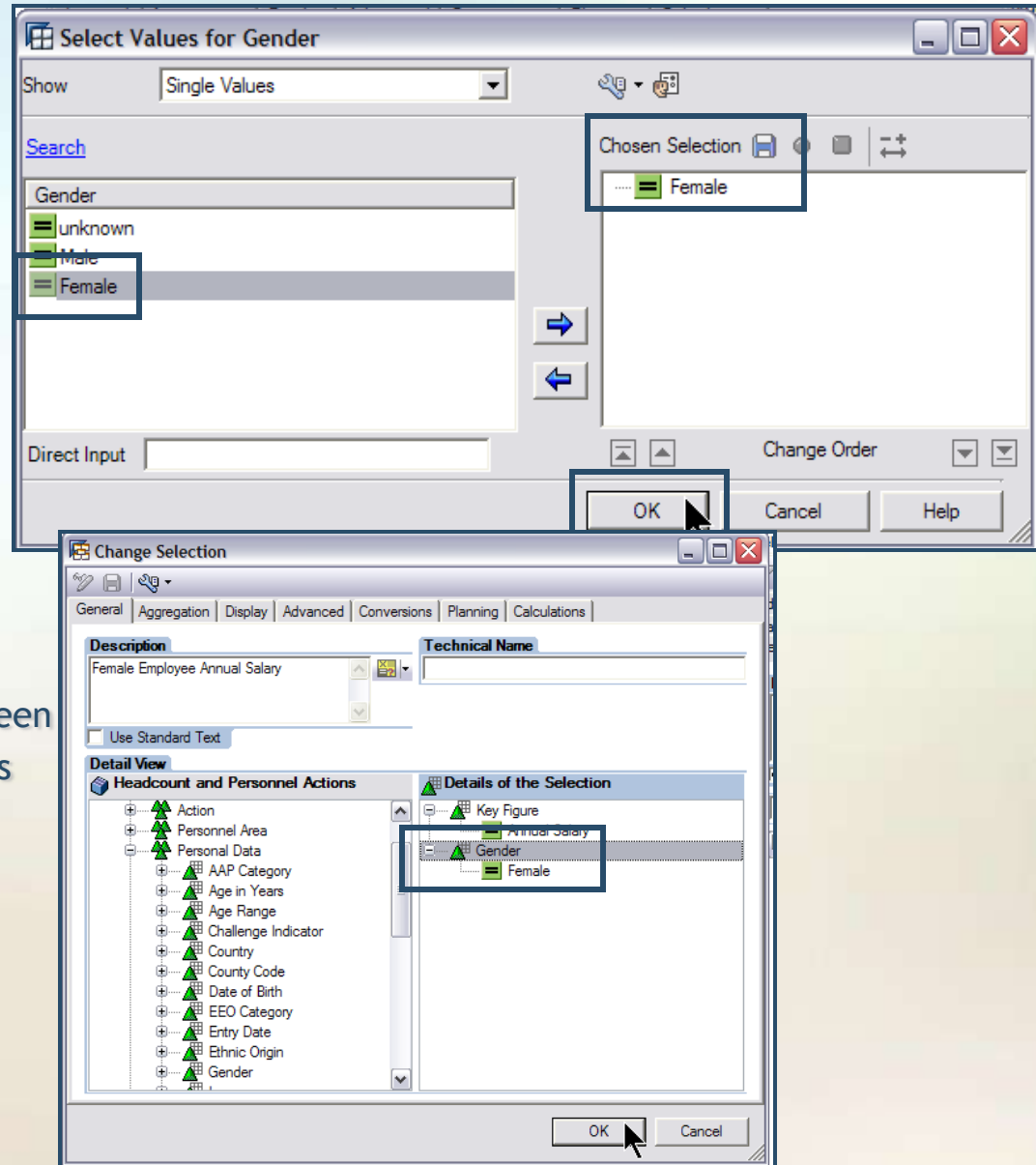
# Demo 2: Modifying a Basic Ad Hoc Query

## III. Adding a Formula, Cont...

8. Drag&Drop Female from the Description column to the Details of the Selection area.
9. Click OK.

Result: The Gender Characteristic restriction has been added to the Female Employees Annual Salary Restricted Key Figure.

10. Click OK to close Change Selection screen.



# Demo 2: Modifying a Basic Ad Hoc Query

## III. Adding a Formula, Cont...

Result: The Female Employees Annual Salary Restricted Key Figure has been created in the Columns section of the query.

This Key Figure will be hidden from the query results in the next steps. It will be used to calculate the Average Salary of Female Employees only.

The screenshot shows the BEx Query Designer interface for a query titled "Demo Basic Query Part 2". The interface is divided into several panes:

- InfoProvider:** Displays a tree structure under "Headcount and Personnel Action" with "Key Figures" and "Dimensions".
- Filter:** Contains "Characteristic Restrictions" (Employment Status) and "Default Values" (Challenge Indicator, Ethnic Origin, Personnel Area).
- Rows/Columns:** Contains "Free Characteristics" (Challenge Indicator, Ethnic Origin) and "Columns".
- Columns:** Lists key figures: "Number of Employees", "Number of Female Employees", and "Female Employee Annual Salary". A box highlights "Female Employee Annual Salary" with an arrow pointing to it from a label "New Restricted Key Figure".
- Rows:** Contains "Personnel Area".

At the bottom, a preview table is visible with columns "Number of", "Number of", and "Female Em". The rows are labeled "a-Personne" and "b-Personne".

# Demo 2: Modifying a Basic Ad Hoc Query

## III. Adding a Formula, Cont...

To hide the Female Employees Annual Salary Restricted Key Figure:

11. Select the Female Employees Annual Salary Restricted Key Figure to access it in the Properties pane..
12. Select the option “Always Hide”.

The screenshot displays the BI Power User Workshop interface. The 'Default Values' pane on the left shows a tree structure with 'Challenge Indicator', 'Ethnic Origin', and 'Personnel Area'. The 'Columns' pane in the center shows a tree structure with 'Key Figures' containing 'Number of Employees', 'Number of Female Employees', and 'Female Employee Annual Salary'. The 'Female Employee Annual Salary' is highlighted with a blue box. The 'Properties' pane on the right shows the 'Female Employee Annual Salary (Sele' dropdown. The 'Hide' section has 'Always Hide' selected. The 'Highlight' section has 'Normal Display' selected. The 'Number of Decimal Places' section has '0.00' selected. The 'Scaling Factor' section has '1' selected. The 'Sign Change' section has 'Keep +/- Sign' selected. The 'Status of Node' section has 'Not Expandable' selected.

This inset screenshot shows a close-up of the 'Columns' pane. It displays the same tree structure as the main screenshot, with 'Key Figures' containing 'Number of Employees', 'Number of Female Employees', and 'Female Employee Annual Salary'. The 'Female Employee Annual Salary' is highlighted with a blue box.

Key Figures that are hidden, change color.

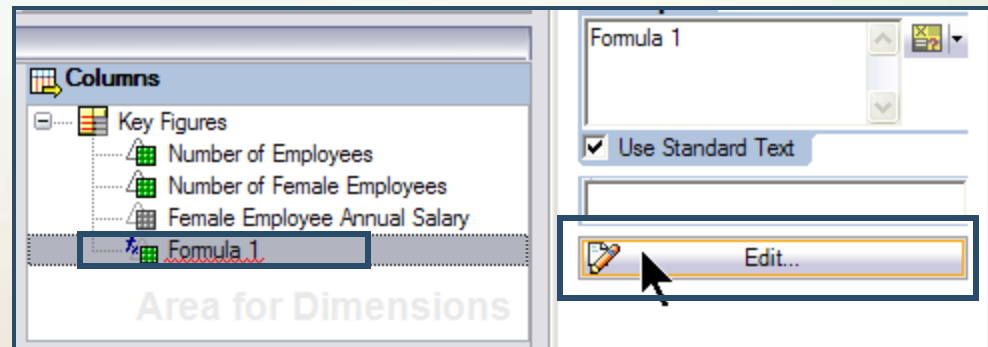
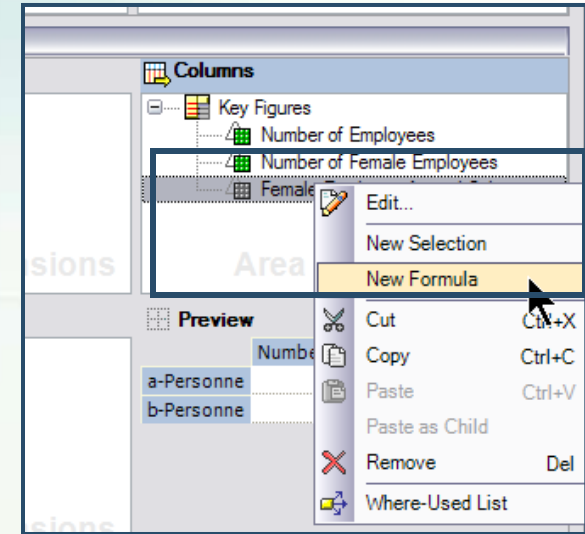


# Demo 2: Modifying a Basic Ad Hoc Query

## III. Adding a Formula, Cont...

Next, create the Formula that will calculate the Average salary of Female Employees:

15. Right mouse-click Key Figures to open the Context Menu.
16. Select New Formula.
17. Select the new formula added to the columns and click Edit.



Result: The Change Formula screen will be displayed.

# Demo 2: Modifying a Basic Ad Hoc Query

## III. Adding a Formula, Cont...

18. Position the cursor in the Formula field.

19. Double-click the Female Employees Annual Salary in the Structure Elements of the Operands list.

The Key Figure will be added to the Formula field.

20. Click the Divided by symbol ( / ).  
The Divided by symbol will be added to the Formula field.

21. Double-click the Number of Female Employees Key Figure in the Structure Elements of the Operands list.

The Key Figure will be added to the Formula field.

22. Click OK.

**Change Formula**

General | Aggregation | Display | Advanced | Conversions | Planning | Calculations

**Description**  
Avg Salary - Female Employee

**Technical Name**

☐ Use Standard Text

**Detail View**  
'Female Employee Annual Salary' / 'Number of Female Employees'

1 2 3  
4 5 6  
7 8 9  
0 .

+ - \* / \*\* ( ) % %A

**Available Operands**

- Key Figures
  - Number of Employees
  - Number of Female Employees
  - Female Employee Annual Salary
- Formula Variable

**Operators**

- Basic Functions
- Percentage Functions
- Data Functions
- Mathematical Functions
- Trigonometric Functions
- Boolean Operators

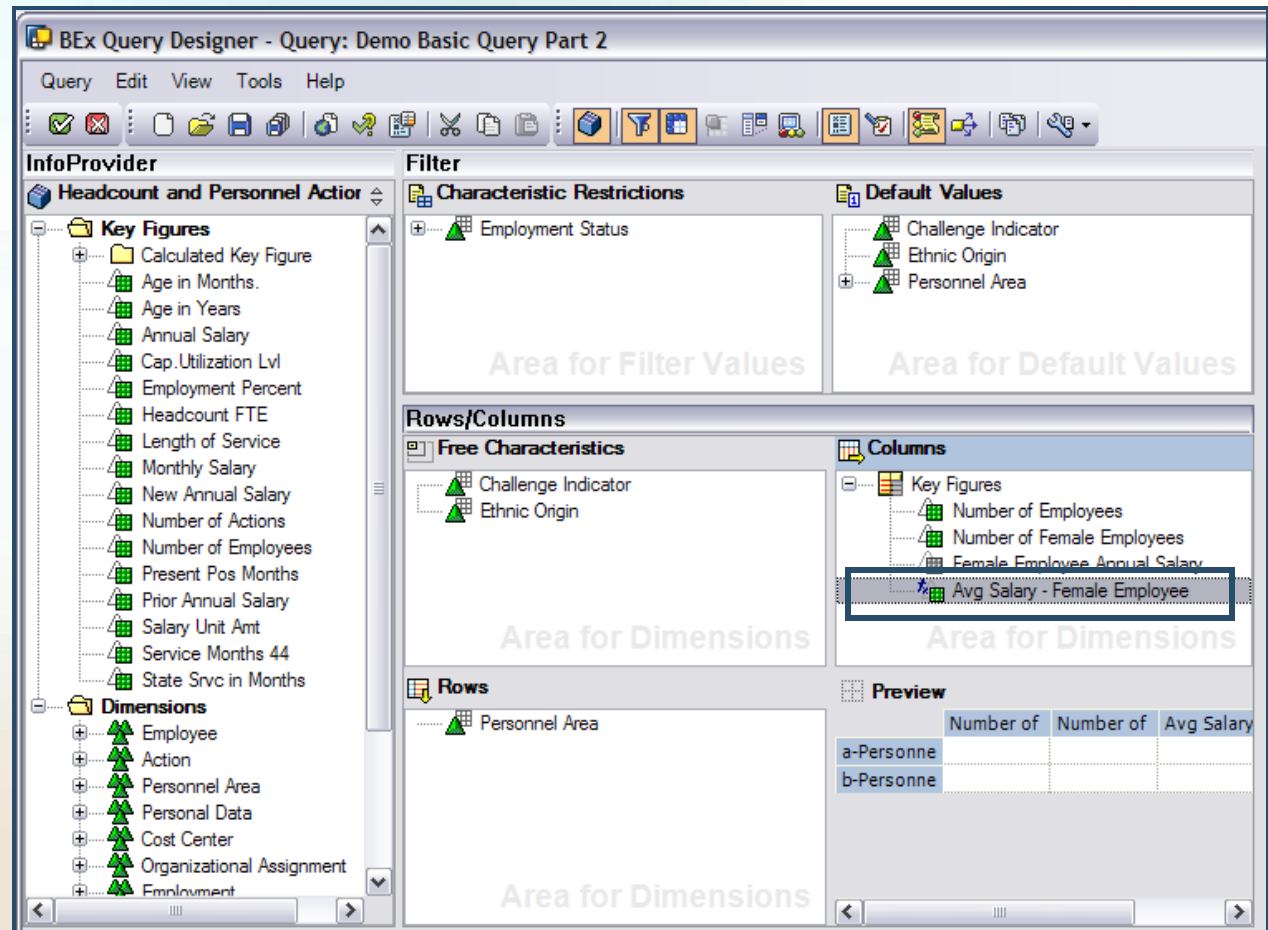
OK Cancel

# Demo 2: Modifying a Basic Ad Hoc Query

## III. Adding a Formula, Cont...


Result: The New Avg Salary - Female Employees Formula has been added to the columns section of the query.

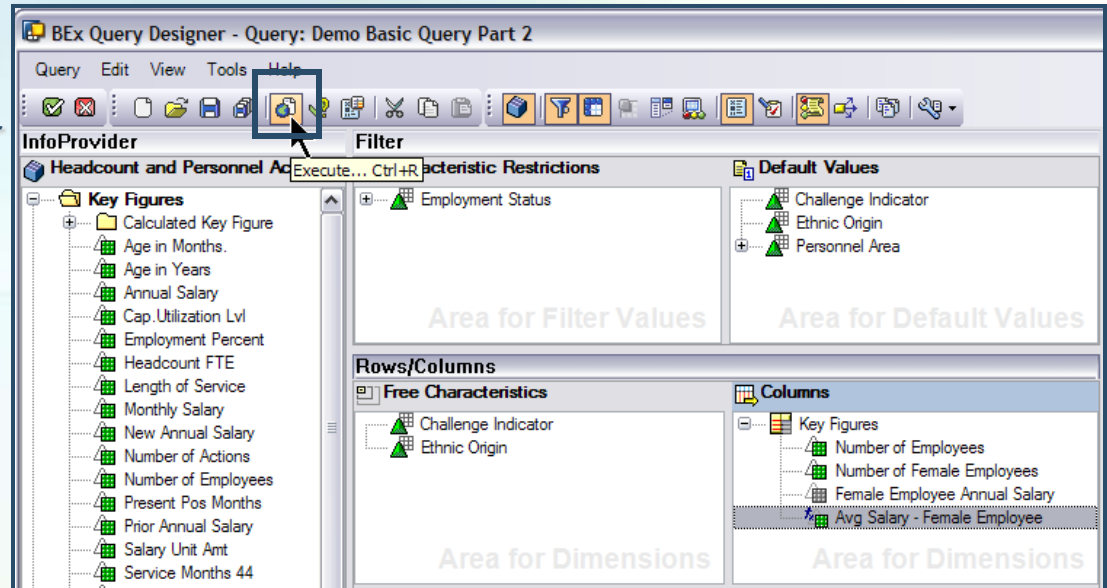
This new Key Figure will calculate the Average Salary of Female Employees in the ad hoc query results.



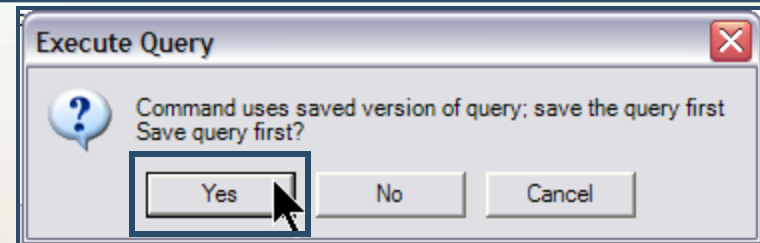
# Demo 2: Modifying a Basic Ad Hoc Query

## IV. Running the Ad Hoc Query

1. Click the Execute Query on the Web icon  from the BEx Query Designer toolbar.



If prompted to Save the query, click Yes.



You may be prompted for a userid and password, click cancel ~ the Portal log on screen will be displayed and this is where you will enter your userid and password.



# Demo 2: Modifying a Basic Ad Hoc Query

## IV. Running the Ad Hoc Query, Cont...

Results: The Variables Entry screen will be displayed (if the user is running an ad hoc query without variables, this screen will not be displayed)

2. Enter report Variables.
3. Click OK.

The screenshot shows the 'Variable Entry' dialog box. At the top, there is a section for 'Available Variables' with a dropdown menu and buttons for 'Save', 'Save As...', 'Delete', and a link for 'Show Variable Personalization'. Below this is a table titled 'General Variables'. The table has three columns: 'Variable' with a sort icon, 'Current Selection', and 'Description'. Two rows are visible: 'Emp Status (Optional)' with a value of '3' and description 'Active', and 'Personnel Area - Select (Optional)' with a value of '1110; 1111' and an empty description. At the bottom of the dialog are 'OK' and 'Check' buttons. Two arrows from the list on the left point to the 'OK' button and the table area.

General Variables		
Variable ↕	Current Selection	Description
Emp Status (Optional)	3	Active
Personnel Area - Select (Optional)	1110; 1111	



# Demo 2: Modifying a Basic Ad Hoc Query

## V. Ad Hoc Query Results

**Demo Basic Query Part 2**

Display As Table Information Send Print Version Export to Excel Comments

Columns	Personnel Area	Number of Employees	Number of Female Employees	Avg Salary - Female Employee
Key Figures				\$
Rows	Dept of Personnel	152	110	56,000.04
Personnel Area	Information Services Division	78	43	70,454.95
Free characteristics	Overall Result	230	153	60,062.53
Challenge Indicator				
Ethnic Origin				

**Demo Basic Query Part 2**

Display As Table Information Send Print Version Export to Excel Comments

Columns	Personnel Area	Ethnic Origin	Number of Employees	Number of Female Employees	Avg Salary - Female Employee
Key Figures					\$
Rows	Dept of Personnel	10/Not assigned	9	9	60,396.00
Personnel Area		American Indian/Alaskan	4	2	62,250.00
Ethnic Origin		Asian or Pacific Islander	9	7	48,776.57
Free characteristics		Black/Not Hispanic origin	10	4	49,377.00
Challenge Indicator		Hispanic	3	1	141,549.00
		White/Not Hispanic origin	117	87	55,303.99
		Result	152	110	56,000.04
	Information Services Division	10/Not assigned	1	2	69,840.00
		Asian or Pacific Islander	9	5	61,010.40
		Black/Not Hispanic origin	5	2	59,106.00
		Hispanic	2	1	60,420.00
		White/Not Hispanic origin	61	35	72,739.40
		Result	78	43	70,454.95
	Overall Result		230	153	60,062.53

# Demo 2: Modifying a Basic Ad Hoc Query

## VI. Bookmark the ad hoc Query Results

1. Click an item in the query results to open the Context Menu.
2. Select Bookmark.
3. Add Favorite popup is displayed. Click OK to add the report to your Internet Explorer Favorites.

**Demo Basic Query Part 2**

Display As: Table Information Send Print Version Export to Excel Comments

Columns: Key Figures, Rows: Personnel Area, Ethnic Origin, Free characteristics: Challenge Indicator

Personnel Area	Ethnic Origin	Number of Employees
Dept of Personnel	Black/Not Hispanic origin	9
	American Indian/Alaskan	4
	Asian or Pacific Islander	9
	Black/Not Hispanic origin	10
	White	3
	Hispanic or Latino	117
	Black/Not Hispanic origin	152
	White	1

Context Menu: Back, Filter, Change Drilldown, Broadcast and Export, Save View, Personalize Web Application, Properties, Broadcast E-Mail, Broadcast to Portal, Broadcast to Printer, Export to CSV, Bookmark

**BEx Web - Demo Basic Query Part 2 - Microsoft Internet Explorer**

File Edit View Favorites Tools Help

Address: [https://myhrms.wa.gov/irj/servlet/prt/portal/prtroot/pcd!3aportal\\_content!2fcom.sap.pct!2fplatform\\_](https://myhrms.wa.gov/irj/servlet/prt/portal/prtroot/pcd!3aportal_content!2fcom.sap.pct!2fplatform_)

Bookmark "BOOKMARK=D3H22J4KDQH00IDIPYKAW6SC6" saved

**Add Favorite**

Internet Explorer will add this page to your Favorites list.

☐ Make available offline Customize...

Name: BEx Web - Demo Basic Query Part 2

OK Cancel Create in >>

Demo Basic Query

Display As: Table

Columns: Key Figures, Rows: Personnel Area, Ethnic Origin, Free characteristics: Challenge Indicator

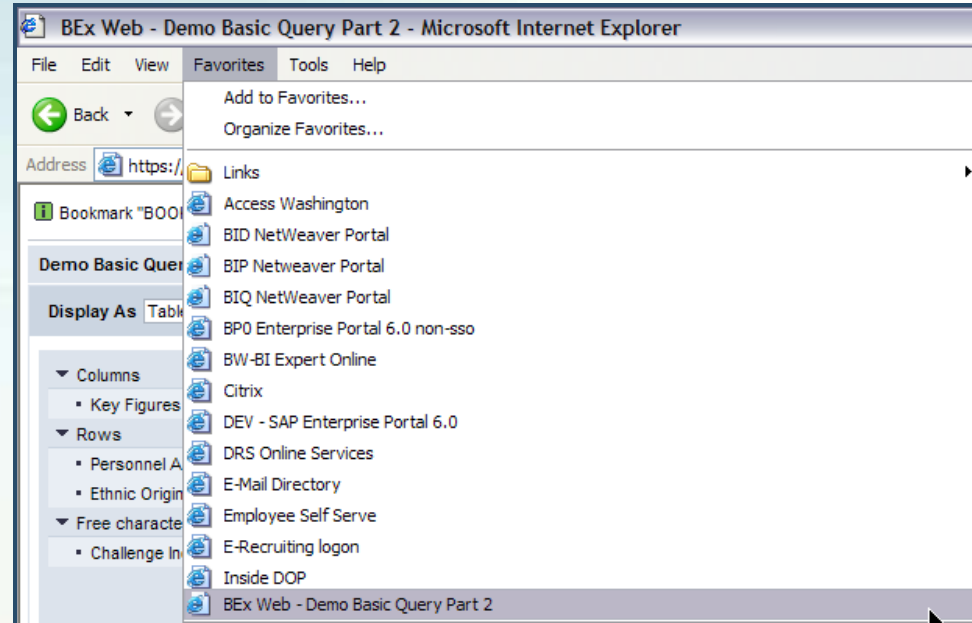
Personnel Area	Ethnic Origin	Number of Employees
	American Indian/Alaskan	4
	Asian or Pacific Islander	9
	Black/Not Hispanic origin	10

# Demo 2: Modifying a Basic Ad Hoc Query

## VI. Bookmark the ad hoc Query Results, Cont...

4. The query has been added to your Favorites.

Result: The Bookmarked query can be run from the Favorites menu in the user's web browser.



- i** To delete the Bookmarked query, right mouse-click the Bookmark in the Favorites folder to open the context menu and click Delete.

